

## Chemical Compatibility of Plastics

Chemical Class	Polypropylene (PP)	Polyethylene (HD-PE)	Polyvinylidene fluoride (PVDF)	Silicone	Polystyrene (PS)
	Finntip BioMate (nose cone)	Plungers (Finntip Stepper, Finntip PDP)	Tip cones (BioControl, Finnpipette Focus, Digital SCP, MCP)	BioMate (adaptor)	Microtiter microplates
<b>Ester</b>					
Dibutyl phthalate	Fair	Good	Good	-	Poor
Ether					
Diethyl ether	Fair	Good	Poor	Poor	Poor
Polyalkylene glycol	Good	Good	Good	-	-
Polyethylene glycol	Good	Good	Good	-	-
Polyethylene sulfide	Good	Good	Good	-	-
Propylene oxide	Good	Good	Good	-	Poor
<b>Halogenated hydrocarbon</b>					
Bromochloromethane	Poor	Poor	Poor	Poor	Poor
Carbon tetrachloride	Fair	Poor	Good	Poor	Poor
2-Chloroethanol	Good	Good	Good	-	-
Chlorobenzene	Poor	Fair	Good	Poor	Poor
Chloroform	Fair	Fair	Good	Poor	Poor
Dichloroethane	Fair	Fair	Good	-	Poor
<b>Heterocyclic compounds</b>					
Tetrahydrofuran	Fair	-	Fair	Poor	-
<b>Ketone</b>					
Acetone	Fair	Good	Poor	Poor	Poor
2-Butanone	-	-	Poor	-	-
Methyl ethyl ketone	Good	Good	Poor	Poor	Poor
<b>Phenol</b>					
Phenol	Fair	Good	Good	Poor	Poor
<b>Salt, inorganic</b>					
Aluminum chloride	Good	Good	Good	Fair	Good
Aluminum fluoride	Good	Good	Good	Good	Good
Ammonium carbonate	Good	Good	Good	Fair	Fair
Barium chloride	Good	Good	Good	Good	Good
Calcium chloride	Good	Good	Good	Good	Good
Calcium sulphate	Good	Good	Good	-	Good
Copper (II) chloride 5%	Good	Good	Good	Good	Good
Iron (II) chloride	Good	Good	Good	Fair	Good
Iron (III) nitrate	Good	Good	Good	-	-
Iron (III) sulphate	Good	Good	Good	Fair	Good
Lithium bromide	Good	Good	Good	-	-
Magnesium chloride	Good	Good	Good	Good	Good
Magnesium (I) nitrate	Good	Good	Good	-	-
Mercury (II) chloride	Good	Good	Good	-	Good
Nickel nitrate	Good	Good	Good	Good	-
Potassium carbonate	Good	Good	Poor	-	Good
Potassium chlorate	Good	Good	Poor	Fair	-
Silver nitrate	Good	Good	Good	Good	Fair
Sodium carbonate	Good	Good	Good	Good	Good
Sodium fluoride	Good	Good	Good	-	-
Sodium hypochlorite 5%	Fair	Good	Fair	Fair	Good
Tin (II) chloride	Good	Good	Good	Fair	-
Tin (IV) chloride	Good	Good	Good	Fair	-
Zinc chloride	Good	Good	Good	Good	Good
Zinc sulphate	Good	Good	Good	Good	-
<b>Miscellaneous</b>					
Culture Media	Good	Good	Good	Good	Good
DEPC	Good	-	Good	Good	Good
DMSO	Good	Good	Poor	-	Good
Ficoll-Hypaque	Good	Good	Good	Good	Good
Sera	Good	Good	Good	Good	Good
Urea	Good	Good	Good	Fair	Good

Good = resistant, no effect

Fair = limited resistance, only for short exposure